

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (canceled)

Claim 2 (previously presented): The method as in claim 8, wherein the first message comprises a range request.

Claim 3 (previously presented): The method as in claim 8, wherein the first message (22) comprises first timing information and is a response to a range request (21) sent from the first node (A) to the second node (B).

Claim 4 (original): The method as in claim 3 further comprising the first node (A) determining the distance between the first node and the second node by considering

the time of transmission of the ranging request (T1), the time of arrival of the first message (T4) and the first timing information of the first message.

Claim 5 (previously presented): The method as in claim 3 wherein the first timing information comprises the time of arrival of the ranging request (T2) at the second node and the time of transmission (T3) of the first message from the second node.

Claim 6 (previously presented): The method as in claim 3, wherein the first timing information comprises the time delay between the arrival of the ranging request and the transmission of the first message at the second node (T3-T2).

Claim 7 (canceled)

Claim 8 (previously presented): A method of obtaining distance relationships between nodes in a network

comprising a first (A), a second (B) and a third node (C), wherein the second node is within transmission range of the first node and the third node, the method comprising:

the third node (C) receiving a first message (22) being transmitted from the second node (B) to the first node (A) and transmitting a second message (24) in response to the first message (22) and the second message (24) comprising second timing information; and

the second node (B) receiving the second message (24) and determining the distance between the second node (B) and the third node (C) by considering the time of transmission of the first message (T3), the time of reception of the second message (T7) and the second timing information.

Claim 9 (previously presented): The method as in claim 8, wherein the second timing information comprises the time of arrival of the first message (T5) at the third node (C) and the time of transmission (T6) of the second message from the third node.

Claim 10 (previously presented): The method as in claim 8, wherein the second timing information comprises the time delay between the arrival of the first message at the third node and the transmission of the second message from the third node (T6-T5).

Claim 11 (previously presented): The method of claim 8, wherein the network is a master/slave network, the first node (A) is the master node and the second (B) and third (C) nodes are slave nodes, and wherein the second message (24) is addressed to the master device (A) and the second node (B) receives the second message by eavesdropping.

Claim 12 (currently amended): The method of claims 8, ~~to~~ wherein the network is mesh network and said second message (24) is addressed to said second node (B).

Claim 13 (previously presented): The method of claim 12 wherein the third node (C) is not within the transmission

range of the first node (A).

Claim 14 (previously presented): The method of claim 8, wherein the request (21), the first message (22) and the second message (24) are comprised in a MAC command frame (29-36).

Claim 15 (previously presented): The method of claim 8, wherein the request (21), the first message (22) and the second message (24) each comprise a transaction ID (34) and the transaction ID of the request, the first message and the second message match.

Claim 16 (previously presented): The method of claim 15, wherein the transaction ID (34) is selected at random by the first node.

Claim 17 (previously presented): The method of claim 8, wherein the request (21), the first response (22) and the second response (24) are sent according to the IEEE

802.15.4 standard.

Claim 18 (previously presented): The method of claim 8, wherein the network comprises a plurality of nodes (C, D, E) eavesdropping on the first message (22) and sending a plurality of messages (24, 37, 38), the second node (B) receiving the plurality of messages and calculating the distances from the second node (B) to each of the plurality of eavesdropping nodes (C, D, E) and wherein each of the plurality of nodes are assigned a reply period to avoid collision of messages.

Claim 19 (original): The method of claim 18 wherein the reply period of each node is assigned in dependence on the power capability of the plurality of nodes.

Claim 20 (original): The method of claim 18 wherein the reply period of each node is assigned at random.

Claim 21 (previously presented): A device operable in a

wireless network having a first node (A), a second node (B), and a third node (C) different from said first and second nodes, the device comprising at the third node (C):

means (11) for receiving a first message (22) being transmitted from the second node to the first node;

timing means (15) for measuring first timing information indicative of a time of transmission of the first message (22); means for transmitting a second message (24) to the second node (B) in response to the first message (22) and the second message including second timing information; and

means for determining a distance between the second node (B) and the third node (C) based on the time of transmission of the first message (22), a time of the reception of the second message (T7) by the second node (B), and the second timing information.

Claim 22 (original): The device according to claim 21 further comprising

a transmitter (11) for transmitting a second message

(24) in response to the first message comprising said timing information.

Claim 23 (original): The device as in claim 22 wherein the timing information is based on the time of arrival of the first message (T5) and the time of transmission of the second message (T6).

Claim 24 (previously presented): The device as in claim 22 wherein the device is configured to transmit said second message (24) in a time slot assigned to the device by the coordinator (A) node of the network.

Claim 25 (previously presented): The device as in claim 22, wherein the first message (22) comprises a transaction id (34) and the device is configured to include a transaction id (34) in the second message (24) based on to the transaction id of the first message.

Claim 26 (previously presented): The device as claim 21

wherein the device operates according to the ZigBee standard.

Claim 27 (original): The device as in claim 26 wherein the device is configured to accept said first message during its sleep mode.

Claim 28 (previously presented): A network comprising a plurality of nodes as claimed in claim 21.

Claim 29 (original): The network of claim 28 comprising ^a mesh network.

Claim 30 (original): The network of claim 28 comprising a master/slave network.

Claim 31 (canceled)

Claim 32 (canceled)

Claim 33 (previously presented): A computer readable medium which stores a computer program which controls a software controllable device to perform the method according to claim 8.

Claim 34 (previously presented): A apparatus operable in a wireless network including a first node (A), a second node (B), and a plurality of additional nodes (C, D, E) different from said first and second nodes, the apparatus comprising at each of the plurality of additional nodes (C, D, E):

a short range transceiver which receives a first message (22) being transmitted from the second node (B) to the first node (A) and transmit a second message to the second node (B) in response to the first message (22);

wherein the first message includes a transaction ID and first timing information indicative of a time of transmission of the first message (22) and the second message includes second timing information including a time of arrival of the first message (T5) at the third

node (C), a time of transmission (T6) of the second message from the third node (T6-T5), and a matching transaction ID (34) based on the first message (22);

an internal clock (15) which measures the first timing information and the second timing information; and

a central processing unit which determines a distance from the second node (B) to each of the plurality of eavesdropping nodes (C, D, E) based on the time of transmission of the first message (22), a time of reception of the second message (T7) by the second node (B), and the second timing information.